

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P644841

Luminaire Tested: OMN4DIP-SR4F0-125D75U940-FLLOOB-1DUDD-WW

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P644841
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2203-563-26, G2-2206-689-19)
Test Lab: INNOVATION CENTER
Issue Date: 2/16/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: OMN4DIP-SR4F0-125D75U940-FLLOOB-1DUDD-WW
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE
DOWNLIGHT - FLAT FROSTED LENS - 1250 LUMENS PER FOOT
UPLIGHT - BATWING OPTIC - 750 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

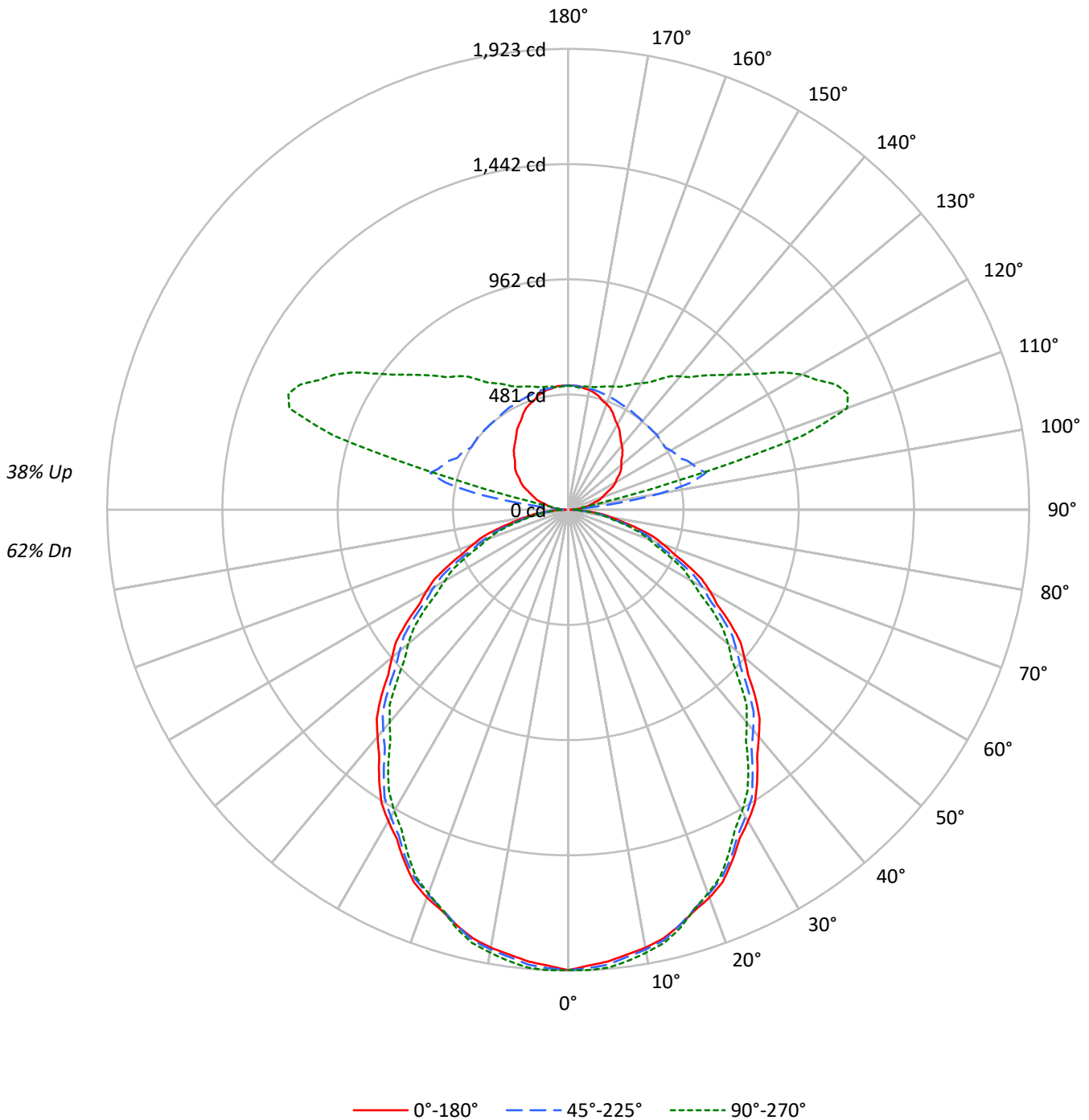
Lumens per Lamp: N/A
Luminaire Lumens: 7468.4 lumens
Efficiency: N/A
Efficacy: 122.8 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.13 / 1.26
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 60.8
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

TEST NUMBER: P644841

CATALOG NUMBER: OMN4DIP-SR4F0-125D75U940-FLLOOB-1DUDD-WW

Luminous Intensity Polar Plot





TEST NUMBER: P644841

CATALOG NUMBER: OMN4DIP-SR4F0-125D75U940-FLLOOB-1DUDD-WW

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	110	110	110	110	103	103	103	103	90	90	90	78	78	78	68	68	68	62
1	101	96	92	89	94	90	87	84	79	77	74	69	67	66	60	58	57	53
2	92	84	78	73	86	79	74	69	70	65	62	61	58	55	53	50	48	44
3	84	74	67	61	78	70	63	58	62	56	52	54	50	47	47	44	41	38
4	77	66	58	52	72	62	55	49	55	49	45	48	44	40	42	39	36	33
5	71	59	51	44	66	55	48	43	49	43	39	43	39	35	38	34	31	28
6	65	53	45	39	61	50	43	37	44	38	34	39	34	31	35	31	28	25
7	60	48	40	34	56	45	38	33	40	34	30	36	31	27	32	28	25	22
8	56	44	36	30	53	41	34	29	37	31	27	33	28	24	29	25	22	20
9	52	40	32	27	49	38	31	26	34	28	24	30	26	22	27	23	20	18
10	49	37	29	24	46	35	28	24	31	26	22	28	23	20	25	21	18	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	31018	31018	31018
5°	30669	30882	31092
10°	30424	30554	30767
15°	30014	30014	30190
20°	29594	29369	29280
25°	28823	28589	28217
30°	27971	27579	27044
35°	27098	26428	25811
40°	26057	25286	24405
45°	25186	24231	23037
50°	24094	23044	21863
55°	23175	21999	20673
60°	22113	20931	19159
65°	20970	19473	17975
70°	19865	18014	16782
75°	18590	16469	15652
80°	17015	15063	14338
85°	15987	14042	13079

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 25186 cd/sqm



TEST NUMBER: P644841

CATALOG NUMBER: OMN4DIP-SR4F0-125D75U940-FLLOOB-1DUDD-WW

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	180.7	2.4
10°-20°	507.1	6.8
20°-30°	737.3	9.9
30°-40°	838.7	11.2
40°-50°	817.8	10.9
50°-60°	698.1	9.3
60°-70°	507.3	6.8
70°-80°	286.9	3.8
80°-90°	89.5	1.2
90°-100°	74.8	1.0
100°-110°	459.9	6.2
110°-120°	619.7	8.3
120°-130°	503.5	6.7
130°-140°	403.4	5.4
140°-150°	317.8	4.3
150°-160°	232.4	3.1
160°-170°	144.4	1.9
170°-180°	49.2	0.7
0°-30°	1425.2	19.1
0°-40°	2263.9	30.3
0°-60°	3779.8	50.6
0°-90°	4663.4	62.4
90°-120°	1154.3	15.5
90°-150°	2379.0	31.9
90°-180°	2805.0	37.6
0°-180°	7468.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1921	1921	1921	1921	1921	
5°	1892	1920	1905	1903	1918	179
15°	1796	1819	1796	1793	1806	506
25°	1618	1633	1605	1576	1584	744
35°	1375	1380	1341	1310	1310	858
45°	1103	1098	1061	1024	1009	849
55°	823	821	782	745	734	735
65°	549	544	510	478	470	545
75°	298	288	264	254	251	316
85°	86	76	76	73	71	92
90°	10	16	22	23	23	12
95°	47	59	34	37	41	45
105°	114	163	595	756	498	121
115°	187	223	511	1056	1234	187
125°	262	298	481	837	990	233
135°	319	354	482	689	791	246
145°	378	410	485	601	664	237
155°	443	459	495	544	570	203
165°	492	498	508	521	531	138
175°	518	521	518	514	511	49
180°	518	518	518	518	518	



TEST NUMBER: P644841

CATALOG NUMBER: OMN4DIP-SR4F0-125D75U940-FLLOOB-1DUDD-WW

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1921.1	1921.1	1921.1	1921.1	1921.1
2.5°	1904.3	1928.9	1914.8	1915.0	1923.1
5°	1892.3	1920.4	1905.4	1903.1	1918.4
7.5°	1872.4	1900.0	1882.4	1879.7	1899.6
10°	1855.7	1881.3	1863.6	1858.7	1876.6
12.5°	1832.7	1858.3	1840.6	1833.6	1851.5
15°	1795.6	1818.6	1795.6	1793.3	1806.1
17.5°	1753.8	1773.7	1747.0	1738.3	1748.0
20°	1722.4	1740.3	1709.3	1696.5	1704.1
22.5°	1682.7	1700.6	1667.5	1648.4	1658.1
25°	1617.9	1633.2	1604.8	1576.2	1583.9
27.5°	1548.3	1560.1	1531.6	1502.4	1505.0
30°	1500.3	1507.9	1479.3	1448.0	1450.6
32.5°	1450.1	1455.7	1425.0	1391.5	1392.0
35°	1374.8	1379.9	1340.8	1309.5	1309.5
37.5°	1294.8	1297.9	1256.1	1222.1	1218.5
40°	1236.3	1241.4	1199.7	1165.5	1157.9
42.5°	1181.9	1182.9	1145.3	1111.1	1101.4
45°	1103.0	1097.9	1061.2	1024.2	1008.9
47.5°	1017.8	1017.8	975.9	939.0	924.7
50°	959.2	959.2	917.4	880.6	870.4
52.5°	904.9	902.8	863.0	826.1	811.8
55°	823.3	820.8	781.5	744.7	734.4
57.5°	737.1	737.1	700.5	661.0	649.8
60°	684.8	684.8	648.2	608.6	593.3
62.5°	628.3	626.3	589.6	554.4	545.2
65°	548.9	543.8	509.7	478.1	470.5
67.5°	473.1	468.0	431.8	406.6	401.5
70°	420.8	415.7	381.6	360.6	355.5
72.5°	370.6	363.5	333.5	316.7	311.6
75°	298.0	287.7	264.0	253.5	250.9
77.5°	229.0	211.6	201.8	194.4	191.8
80°	183.0	167.6	162.0	156.8	154.2
82.5°	143.2	127.9	126.5	123.3	120.8
85°	86.3	76.0	75.8	73.1	70.6
87.5°	37.6	32.7	33.7	33.8	33.8
90°	10.5	16.2	22.2	22.8	22.8
92.5°	26.6	24.2	25.8	31.2	31.7
95°	47.0	59.0	33.9	37.2	41.0
97.5°	64.5	103.4	198.8	61.1	51.5
100°	80.2	126.6	389.5	115.7	77.5
102.5°	93.7	142.7	525.0	301.1	164.0
105°	114.0	163.0	594.7	755.5	498.3
107.5°	136.9	173.1	568.0	1098.4	1026.5
110°	150.5	186.1	552.3	1154.1	1237.5

TEST NUMBER: P644841

CATALOG NUMBER: OMN4DIP-SR4F0-125D75U940-FLLOOB-1DUDD-WW

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	166.1	201.8	536.7	1121.5	1263.5
115°	187.0	222.6	510.6	1055.9	1234.2
117.5°	211.0	246.1	504.8	987.6	1171.1
120°	229.3	261.8	494.4	935.7	1126.8
122.5°	240.2	277.3	481.3	891.1	1066.8
125°	262.5	297.5	481.3	837.2	990.0
127.5°	278.8	316.5	482.0	774.6	925.5
130°	289.2	327.4	484.6	732.7	876.0
132.5°	300.1	338.3	482.5	713.9	831.7
135°	319.1	354.2	482.0	689.4	791.3
137.5°	335.4	373.0	482.0	662.4	749.7
140°	348.5	383.5	482.0	646.6	726.2
142.5°	361.5	394.0	484.6	628.3	702.8
145°	377.8	409.6	485.2	600.7	664.3
147.5°	397.3	425.3	489.1	580.8	629.8
150°	410.3	435.8	491.7	567.6	609.0
152.5°	423.4	446.3	491.7	557.0	590.7
155°	442.9	458.8	495.0	544.4	569.9
157.5°	458.5	473.8	498.9	536.4	554.9
160°	468.9	481.7	501.5	531.2	547.1
162.5°	476.8	489.5	504.1	528.5	539.3
165°	491.7	498.1	508.0	521.3	530.8
167.5°	500.2	505.9	511.3	517.9	523.7
170°	508.0	511.2	511.3	517.9	521.0
172.5°	510.6	516.4	513.9	515.3	518.4
175°	517.8	521.0	517.8	514.5	511.3
177.5°	517.8	520.3	517.8	517.7	515.2
180°	517.8	517.8	517.8	517.8	517.8

(END OF REPORT)